



FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management Solid Waste Section

UNIT TYPE:												
Lined MSWLF	X	LCID		YW		Transfer		Compost	X	SLAS		COUNTY: LINCOLN PERMIT NO.: 55-03 FILE TYPE: COMPLIANCE
Closed MSWLF	X	HHW		White goods	X	Incineration		T&P	X	FIRM		
CDLF	X	Tire T&P / Collection	X	Tire Monofill		Industrial Landfill		DEMO		SDTF		

Date of Site Inspection: June 25, 2013

Date of Last Inspection: February 22, 2012

FACILITY NAME AND ADDRESS:

Lincoln County Landfill MSW & C&D
 5291 Crouse Rd. (SR-1169)
 Crouse, NC 28033

GPS COORDINATES:

N: 35.42288° E: - 81.35695°

FACILITY CONTACT NAME AND PHONE NUMBER:

Mark Bivins – Solid Waste Manager
 Phone (704) 732-9030
 Fax: (704) 732-9048
 mbivins@lincolncounty.org

FACILITY CONTACT ADDRESS:

George Wood – Lincoln County Manager
 115 W. Main St.
 Lincolnton, NC 28092
 (704) 736-8471

PARTICIPANTS:

Bill Wagner, Environmental Senior Specialist – Solid Waste Section.
 James Horn, Lincoln Co. Solid Waste – Landfill Operations Manager
 Mark Bivins, Lincoln Co. – Solid Waste Manager

STATUS OF PERMIT:

Permit 55-03 (DIN 15110) – Issued on March 13, 2013
 Expires September 11, 2016

PURPOSE OF SITE VISIT:

Comprehensive Audit

STATUS OF PAST NOTED VIOLATIONS:

15A NCAC 13B .1604(b)(2)(C) “Duty to Provide Information” – on February 29, 2012 Lincoln County was requested to submit a landfill gas corrective action plan for review and approval. On August 6, 2012 Lincoln County’s consultant S&ME notified Bill Wagner that they had developed and implemented a monthly methane monitoring program as a corrective action. Violation corrected.

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HISTORY and BACKGROUND:

Document Type	Date	DIN
Permit to Operate; Original Issuance (MSW Unit)	9/23/86	N/A
Permit to Operate; (MSW Vertical Expansion - Area E)	5/22/92	N/A
Permit to Construct and Operate; (Demolition Disposal Area)	8/28/92	N/A
Permit to Operate; (MSW Phase I, Cell 1)	8/8/93	N/A
Closure Letter; (MSW Area "E")	12/21/95	N/A
Permit to Operate; Renewal (MSW Phase I)	4/5/99	N/A
Permit to Construct; (C&D Phase II)	4/5/99	N/A
Permit to Construct; (C&D Phase II)	3/31/03	N/A
Permit to Operate – Modification (MSW Phase I, II, and III – C&D Phase IIA)	8/18/03	N/A
Permit to Operate; Amendment (MSW Phase I, II and III - C&D Phase IIA)	9/11/06	409
Permit to Operate; Modification (MSW Phases I, II and III - C&D Phase IIA)	9/15/09	8351

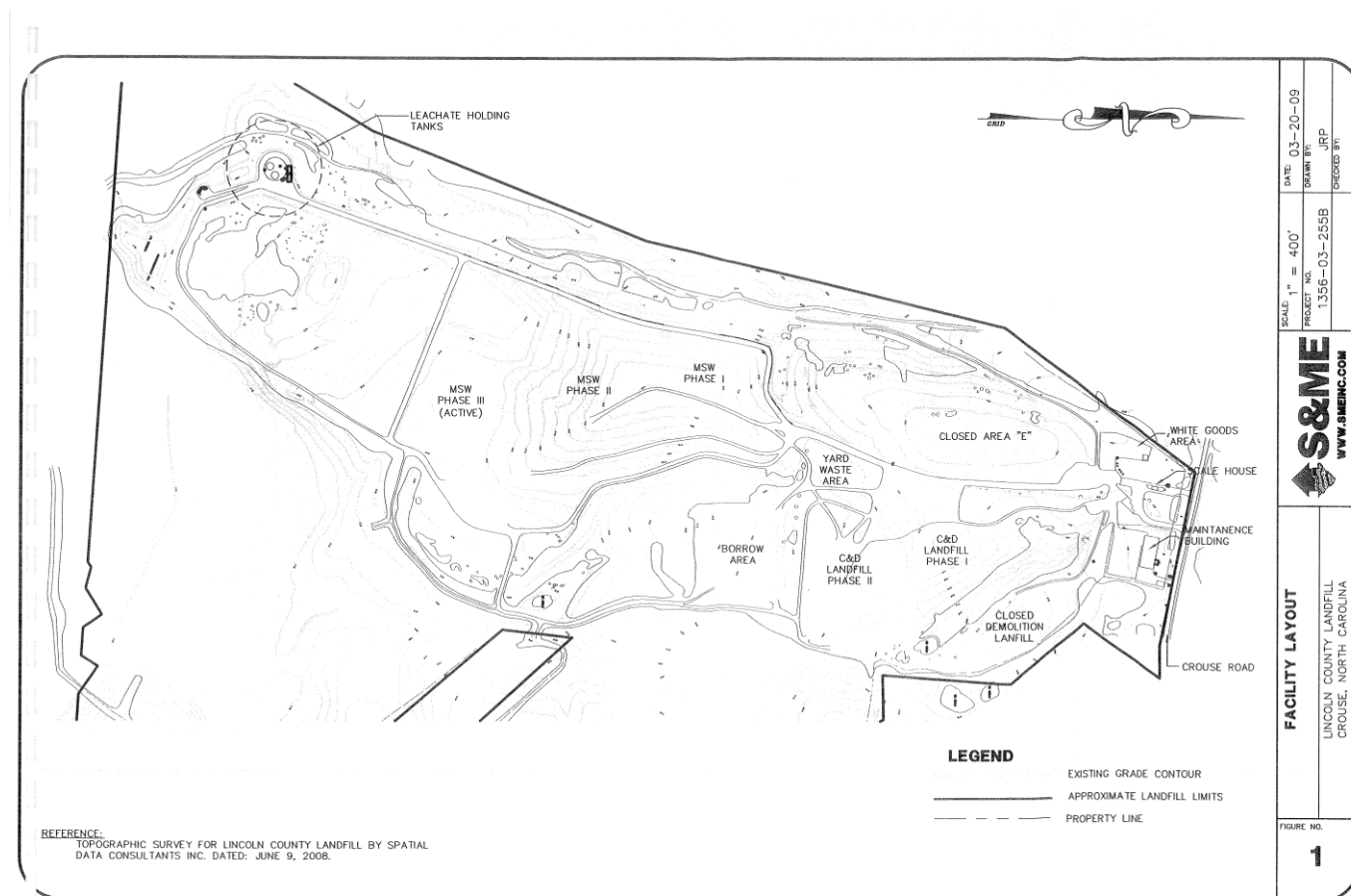


Figure 1: Site Map Lincoln Co. MSW and C&D Landfills 56-03

OBSERVED VIOLATIONS

None.

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ADDITIONAL COMMENTS

1. Landfill hours of operation: Monday – Saturday 8:30 to 4:30
2. Copies of the landfill permit to operate and the associated operations plans are maintained in the landfill office.
3. Staff Certifications (SWANA):

Name	Certification	Expiration Date
David Bivins	MOLO	09/24/15
William Link	Landfill Operations Specialist	03/16/16
Mike Smith	Landfill Operations Specialist	10/14/14
James Horn	Landfill Operations Specialist	10/14/14
Jimmy Rudisill	Landfill Operations Specialist	04/15/14
Joshua Scott	Landfill Operations Specialist	10/14/14
Matthew Jewel	Landfill Operations Specialist	10/14/14
Joseph Gate	Landfill Operations Specialist	02/13/15
David Hubbard	Landfill Operations Specialist	04/21/16
Doug Morrison	Landfill Operations Specialist	02/23/16
Jeff Dellinger	Landfill Operations Specialist	04/15/14
Walter Laughlin	Landfill Operations Specialist	03/19/16
Jimmy Wise	Landfill Operations Specialist	10/14/14
Travis Avery	Landfill Operations Specialist	04/16/16

Access and Safety

4. Access to the facilities is well controlled and the site is surrounded by fencing.
5. There is proper signage at the landfill entrance. (Photo #1)
6. The access roads are well maintained.
7. Traffic control signs are well placed.
8. The facility is served by the municipal water system. There is one fire hydrant at the landfill shop and a second hydrant outside of the main entrance.
9. Howards Creek and Crouse volunteer fire departments provide fire and emergency response as needed.



1. Entrance to the Lincoln County Landfill. Scale house is on the left.



2. Edge-of-waste marker.

Closed Municipal Solid Waste Unit: Area "E"

10. A review of the Solid Waste Section's records failed to find any specific requirements for the closure of this landfill unit. Lincoln County does not have any records concerning specific requirements for the closure of this landfill unit. It is believed that this unit closed prior to 12/21/95.

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11. The cap has a well established and well maintained vegetative cover. (Photo 1)
12. Edge-of-waste markers are in place at this unit. (Photo #2)
13. There was no evidence of any excessive on-site erosion of the cap.
14. While the cap is showing some signs of differential settling that could allow water to pond on the landfill, no ponded water was observed.



1. Looking (S) down the eastern side of the closed MSW landfill. (Access road is in the background.)



2. Looking (NW) across the working face of the C&D landfill. (Type I composting operations in the left background.)

Construction & Demolition (C&D) Landfill – Phase II

15. Tipping fees for the C&D landfill are currently \$20 per ton.
16. The C&D landfill is currently taking in approximately 500 – 600 tons of waste per month.
17. The landfill was actively receiving waste during the audit.
18. No prohibited wastes were observed during the inspection.
19. Waste screening records were reviewed. Approximately 1% of all incoming loads are screened.
20. Waste screening is done daily.
21. The active working face was well managed, and not too large. (Photo #2)
22. There was very little windblown waste.
23. The edge of waste was clearly identified with permanent markers.
- 24.

Municipal Solid Waste (MSW) Landfill – Phase III

25. Tipping fees for the MSW landfill are currently \$32 per ton.
26. The MSW landfill is currently taking in approximately 3,200 to 3,400-tons of waste per month.
27. The landfill was actively receiving waste during the audit.
28. No prohibited wastes were observed during the inspection.
29. Waste screening records were reviewed. Approximately 1% of all incoming loads are screened.
30. Waste screening is done daily.
31. The working face was small and well managed. (Photo #3)
32. There was very little windblown waste.
33. Application of daily cover appeared to be adequate. (Photo #4)
34. Leachate Management:
 - a) The leachate collection system consists of two 250,000-gallon aboveground storage tanks (ASTs).
 - b) Leachate is gravity fed to a lift station which pumps the leachate up to the leachate ASTs.
 - c) Leachate is routinely removed from the ASTs whenever the level exceeds 50% capacity of any one tank.
35. The edge of waste was clearly identified with permanent markers.
36. Even though landfill staff has had the slopes of the active MSW landfill “hydro-seeded” much of the lower

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southern and western slopes are sparsely vegetated. It is recommended that Lincoln County solid waste contact the local agricultural extension office for assistance with ensuring that all of the necessary nutrient requirements for the establishment and maintenance of the necessary vegetative cover are met.



3. MSW landfill actively receiving waste.



4. Looking (SE) at the daily cover on the active MWS landfill.



5. Looking (NE) from access road at the southern slopes of the active MSW landfill. Note that these slopes are in need of a vegetative cover.



6. Looking (S) down the western slopes of the active MSW landfill. (Two above ground leachate tanks in the upper right background.)

Treatment and Processing (T&P) Area – Wooden Pallet Grinding

- 37. Wooden pallets are ground into boiler fuel.
- 38. Lincoln County owns the grinder for processing the wooden pallets.
- 39. Currently there is very little market for this boiler fuel.

Small Type I Composting – Yard Waste

- 40. A *Request for Acknowledgement Letter (RAL) – Small Type I Composting Unit* has been approved for the grinding of yard waste into mulch.
- 41. Lincoln County owns the grinder for processing the yard waste.
- 42. The yard waste mulch was windrowed into three windrows at the time of inspection.
- 43. After composting (131°F for at least three days) the mulch is either distributed for use at Lincoln County facilities and properties or given away to Lincoln County residents.
- 44. Compost temperature records were reviewed.

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45. Compost is given to Lincoln County residents at no cost. (Photos #7)



7. Compost being loaded into a Lincoln County resident's trailer.



8. Electronics staged on the white goods pad prior to being shipped out.



9. Electronics loaded into trailer prior to being shipped out.



10. Three trailers used for the storage of scrap tires.

White Goods & Scrap Metal Area

- 46. White goods and scrap metals are staged on a concrete pad with push-walls.
- 47. White goods were well organized and stored in upright positions.
- 48. Scrap metal is collected by *Southern Metals* in Charlotte for recycling.
- 49. Landfill staff removes CFCs (refrigeration gases) from the white goods as needed. The CFCs are taken to *Gemaire* facility in Hickory for disposal.
- 50. This area was clean and well maintained.
- 51. Used restaurant grease (cooking oil) is collected by *Mahoney Environmental* for recycling. (Photo #11)



11. Used cooking oil collection bin.

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Electronics Recycling

- 52. All electronics are collected and taken for recycling by *eCycleSecure* of Charlotte, NC.
- 53. Electronics are staged and shipped from the white goods concrete pad. (Photos #8 & #9)

Scrap Tires

- 54. Scrap tires are stored in semi-trailers prior to being shipped to the *US Tire* facility in Concord, NC.
- 55. US Tire charges the landfill \$86 per ton for tire recycling and disposal.
- 56. Scrap tire records were reviewed. (These records are maintained in the Scale House.)
- 57. The scrap tire area was well managed. (Photo #10)
- 58. Scrap tire records are maintained in the scale house.

Water Quality Monitoring

- 59. Water quality monitoring records were reviewed.
- 60. Water quality samples are collected semi-annually by the landfill's consultant, S&ME. The most recent report of semi-annual water quality monitoring was for the sampling event that occurred on October 8, 2012 through October 10, 2012.
- 61. The water quality monitoring plan consists of twenty-eight groundwater monitoring wells, six surface water monitoring points and one leachate sample.
- 62. A random inspection of groundwater monitoring wells found all wells to be in good repair, secured with padlocks and clearly marked with unique IDs / well tags that were correlated with maps provided by the facility. (Photo #11)



11. Typical groundwater monitoring well – properly identified and locked.



12. Two 250,000-gallon above ground leachate storage tanks located in the (SW) corner of the facility.

Landfill Gas Monitoring

- 63. Landfill gas monitoring is done by landfill staff.
- 64. A *GEMTM 2000 Landtec* gas monitor is used.
- 65. Then landfill gas monitoring plan consists of gas monitoring wells MMW-1,2,3,4,5,6,7, and 8, along with the monitoring the shop, scale house and leachate lift station.
- 66. Continuous methane gas detectors are installed in the shop building, scale house, and the lift station.
- 67. Landfill gas monitoring is done monthly and results are submitted to the Section quarterly. The most recent monitoring event occurred on May 21, 2013. Methane monitoring wells MMW-6 and MMW-7 both showed elevated methane levels.
- 68. A random inspection of landfill gas monitoring wells found all wells to be in good repair, secured with padlocks and clearly marked with unique IDs / well tags that were correlated with maps provided by the facility.

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Leachate Management

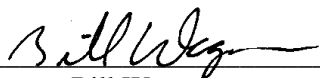
- 69. The leachate collection system consists of two 250,000-gallon aboveground storage tanks (ASTs). (Photos #6 and #12)
- 70. Leachate is gravity fed to a lift station which pumps the leachate up to the leachate ASTs.
- 71. Leachate is removed from the ASTs and hauled by landfill staff to the Lincolnton waste water treatment plant.
- 72. Leachate is routinely removed from the ASTs whenever the level exceeds 50% capacity of any one tank.

Disaster Debris Staging

- 73. The landfill area located northeast of the leachate tanks and south of Phase III of the MSW landfill can be used as a vegetative disaster debris staging area if needed.

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

Please contact me if you have any questions or concerns regarding this inspection report.



Bill Wagner

Environmental Senior Specialist
Regional Representative

Phone: 828-296-4705

Sent on: <u>7/02/13</u>	X	Email To: mbivins@lincolncounty.org		Hand Delivery	X	US Mail		Certified No.
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ec: Jason Watkins, District Supervisor – Solid Waste Section
Sarah Rice, Compliance Officer – Solid Waste Section
Mark Bivins, Solid Waste Manager – Lincoln County mbivins@lincolncounty.org